Improving the Data Sharing and Migration Capabilities between EDAS and STORET

Jeffrey S. White Erik W. Leppo Tetra Tech, Inc 10045 Red Run Blvd., Suite 110 Owings Mills, MD 21117 Tel: 410-356-8993

Fax: 410-356-9005

E-mail: Jeffrey.White@tetratech.com

EDAS, the Ecological Data Applications System, is an MS-Access based data management and analysis tool to facilitate biological monitoring and assessment of water quality. EDAS incorporates a range of functions from data storage in a relational database, calculation of metrics, creation of assessment reports, to the creation of export files (including formatted files to take advantage of SIM and STORET's upload capabilities).

The development of EDAS is the result of the combined of efforts of scientists and information systems specialist at Tetra Tech and with several groups of state-level users (data producers and data users). The ecological sciences division of Tetra Tech has assisted over 20 states with the development and implementation of innovative biological water quality monitoring programs. This experience gives Tetra Tech unique qualifications for understanding user requirements needed for the development of software for both data management and water quality analysis tools.

EDAS continues to grow and improve with links to the latest statistically based analysis tools. Current analytical features include calculation of biological metrics associated with EPA's Rapid Bioassessment Protocols (1999), a "starter" taxonomic database including biological attributes, and linkage of taxonomy to ITIS (the US standard for taxonomic nomenclature). In support of Tiered Aquatic Life Use (TALU) and Biocriteria development, future versions of EDAS will include predictive models. These tools will support the continued popularity of EDAS with organizations engaged in biological water monitoring activities.

Tetra Tech is planning a new version of EDAS with improved data sharing and migration capabilities to and from STORET. Developing EDAS for the purpose of easing the transfer of data to STORET will help bring EDAS users into the STORET community. Tetra Tech's project vision for a new version of EDAS is to create the "easiest-to-use" EDAS with "easy-to-use" data sharing tools for SIM and STORET.

The 2004 National STORET Users Conference workshop will provide demonstrations of the current EDAS while soliciting user feedback and exploring key requirements that will ease the transfer of biomonitoring data from EDAS to STORET. This preliminary requirements-gathering activity will be open-ended and not necessarily end with the conference session. If interest exists, then an informal biomonitoring group may stay in contact and continue the requirements development process.

Topics for exploring user requirements will include:

- 1. Methods for data transfer or sharing between EDAS, SIM, and STORET.
- 2. Additional analytical tools.
- 3. Additional reporting capabilities.
- 4. An Oracle version of EDAS.
- 5. User recommended requirements.

Users will be provided instructions and assistance on downloading and installing a free copy of EDAS. Use of EDAS does require an installed copy of Access 2000.